AMENDMENTS TO THE CLAIMS

IN THE CLAIMS:

A complete set of claims is provided below.

1.-38. (Canceled)

39. (Currently Amended) An apparatus for controlling the movement of a surgical tool to be inserted into the body of a patient, comprising;

a controllable magnetic field source having a first cluster of electromagnet poles and a second cluster of electromagnet poles, said first cluster of poles substantially opposed to said second cluster of poles;

a tool having a distal end responsive to said magnetic field;

one or more sensors configured to sense a current position of said distal end;

a system controller for controlling said magnetic field source to control a movement of said distal end according to a feedback calculation wherein said system controller ~~is configured to compute~~ **computes** a position error ~~comprising~~ **as** a difference between a desired position of said distal end and said current position of said distal end compensated by **data from an auxiliary device that measures a position of a heart relative to a frame of reference, such that said system controller computes said position error to compensate for a dynamic position of a wall of a heart chamber such that said distal end moves substantially in unison with a natural motion of said wall** ; and

a user control device to provide user inputs to said system controller wherein said system controller provides tactile feedback to a user through said user control device when said position error exceeds a predetermined value while simultaneously compensating for said dynamic position as said distal end moves substantially in unison with a natural motion of said wall ~~a Virtual Tip that provides tactile feedback to an operator when said position error exceeds a predetermined amount, wherein an amount~~

~~**of said tactile feedback is computed by said system controller at least in part according to said position error, wherein a correction input to said desired position is computed based on data from an auxiliary device that measures a position of a heart relative to a frame of reference, such that said system controller compensates for a dynamic position of a wall of a heart chamber such that said distal end moves substantially in unison with a natural motion of said wall**~~.

40. (Previously Presented) The apparatus of Claim 39, said distal end comprising one or more piezoelectric rings.

41. (Previously Presented) The apparatus of Claim 39, said distal end comprising one or more piezoelectric rings for providing sensor data to a system controller.

42. (Original) The apparatus of Claim 39, further comprising an operator interface unit.

43. (Original) The apparatus of Claim 39, wherein said first cluster of poles is connected to said second cluster of poles by a magnetic material.

44. (Canceled)

45. (Previously presented)The apparatus of Claim 39, further comprising:
a Virtual Tip Calibration Fixture.

46. (Original) The apparatus of Claim 39, further comprising:
a communication controller;
a calibration fixture; and

one or more temperature sensors.

47. (Previously presented) The apparatus of Claim 39, wherein said one or more sensors comprise one or more temperature sensors paired with one or more magnetic sensors.

48.-66. (Canceled)